



ISLAND PILOT DSE

Solar Seafarer

Island Pilot's solar-powered 40 is no mere concept boat

By Dudley Dawson

Viewed from the proverbial bird's eye, the Island Pilot DSe could easily be mistaken for a satellite moored in geostationary orbit in space. The power catamaran's deckhouse and pilothouse are covered by SunPower SPR-95 photovoltaic solar panels with a 6.8kW maximum. According to the manufacturer's claims, this array powers the 40-foot yacht to a sunny-day, solar-power-only speed of six knots. At night or when it's overcast, AGM deep-cycle batteries take over from the cells.

If a burst of speed is desired, auxiliary diesels driving 25kW generators can boost the power to the two 36 hp electric motors, bringing the vessel quickly to her top cruising speed of 15 knots and making her part of a long tradition of diesel-electric locomotives, submarines and surface vessels. Under full power, the designers claim up to five nautical miles per gallon of diesel fuel.

Clearly, the Island Pilot DSe stirs the imagination once the possibilities are considered. Consider the *Waterworld* scenario: Given a bit of patience and planning, one or two couples could spend months gunkholing along the coast or around an island chain without using a drop of diesel; cruisers in the Caribbean, Gulf of California, Hawaii and the South Pacific take heed.

The Island Pilot has a fully equipped galley that includes a three-burner electric range, a 14.7-cubic-foot refrigerator/freezer and a microwave/convection oven. There's also a washer/dryer, six-gallon water heater and Vacuflush toilets. And, yes, there's full air-conditioning.

**SUNNYSIDE:**

With her photovoltaic panels (above) soaking up the power, the 40 can cruise and recharge simultaneously.

batteries back to full charge. They can also be charged using power from the generators or from the dual 30-amp shore power hook-ups. The techies at Island Pilot advise that the system functions best over the long term by using the sun as the primary power source, with the generators as the preferred secondary. Using the batteries as an occasional buffer, rather than as a continual power source, both maximizes efficiency and prolongs battery life.

The two torpedo-shaped, core-composite hulls keep form resistance to a minimum, resulting in reduced propulsion power demands. The catamaran configuration also yields a tremendous amount of open deck area, maximizing the amount of solar power collected over the yacht's 40-foot length. Aft, the smooth-running electric motors are easily accessible under the stateroom settees.

In one of the two staterooms, an island queen berth is fitted transversely into the bridging structure for ease in making the bed or changing linens. The head and dressing area are forward. The second stateroom is a split-level configuration, with a queen berth on deck that can be changed to twin singles. Amidships, recessed halfway into the bridging structure between the hulls, are the galley, a spacious dinette and an entertainment system. The helm is fully equipped with radar, GPS, VHF and autopilot, all by Raymarine, plus Navionics charting and a Ritchie compass. Central to the maneuvering of the yacht is a joystick control, which turns the motor-driven

propellers at different speeds for steering. By eliminating rudders completely the Island Pilot eliminates appendage drag and yields a slight improvement in propulsive efficiency, but it also does away with any possibility of bringing the yacht home on one motor.

While the Island Pilot DSe has limitations for long-distance or northern cruising, it is certainly an interesting and viable alternative for island hopping, especially in the tropic climes.

Contact: *Island Pilot*, (888) 443-2965; www.dsehybrid.com

LOA: 39'6"
LWL: 35'
Beam: 17'
Draft: 2'2"
Fuel capacity: 120 gal.
Water capacity: 120 gal.
Holding capacity: 60 gal.
Displ.: 16,000 lb.
Power: 2x Ossa Powerlite 25 kW generators, each driving a 36 hp Ossa Powerlite electric motor
Design: Island Pilot/Reuben Trane & George Petrie
Price: \$500,000 (less pre-construction discounts)